

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Self Initiated Inspection

P080939272

FACILITY: The Shack Hunting Blinds		SRN / ID: P0809
LOCATION: 3415 Roger B. Chaffee Suite 207, KENTWOOD		DISTRICT: Grand Rapids
CITY: KENTWOOD		COUNTY: KENT
CONTACT: Tommy Zondervan , Owner		ACTIVITY DATE: 03/30/2017
STAFF: April Lazzaro	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MINOR
SUBJECT: Announced, unscheduled inspection.		
RESOLVED COMPLAINTS: C-17-00935		

Staff, April Lazzaro arrived at The Shack Hunting Blinds to conduct an announced, unscheduled inspection as a result of an odor complaint. The inspection was announced, because the owner, Tommy Zondervan was informed by the complainant that the complaint was made. He contacted the AQD to increase his awareness on AQD requirements.

FACILITY DESCRIPTION

The Shack Hunting Blinds is an open molding reinforced plastic hunting blind manufacturer. Mr. Zondervan also makes after-market Camaro parts at this location, using the same open molding technique, under a different business entity. During the process, the polyester resin solution is mixed with a small amount of catalyst and applied with chopped glass fibers via a "chopper gun" to the surface of a mold. Emissions from this process are in the form of styrene which is contained in the resin. Based on the SDS of the resin used, it is not a vapor suppressed resin. Styrene is a Toxic Air Contaminant, a Volatile Organic Compound and a Hazardous Air Pollutant.

Mr. Zondervan purchased this business from the previous owner in the fall of 2016. Since then, he has been working with his neighbor, the complainant, and the landlord of the complex to try and mitigate odors. One way he has done this is to mix a bubble gum scent in with the resin during application. This has not been successful. Mr. Zondervan also installed a stack with fan over the application booth, which has also not been successful in eliminating the odor complaints from his neighbor. We discussed sealing up all holes in the wall above the booth that may be allowing vapors to seep into the neighbor's space. This will be done ASAP.


I asked Mr. Zondervan if the former owner had informed him that the emissions of styrene from this process typically require a permit, and that it previously operated pursuant to a permit which I brought with me. I explained that the former permit will not transfer to this new location. I asked if he had done calculations to determine emissions of styrene from this process and he had not.

I conducted calculations based on the Unified Emission Factors for Open Molding of Composites table dated July 23, 2001. The emission factor for mechanical atomized resin application is 108.16 pounds per ton of resin processed. Mr. Zondervan provided usage information, and is processing 0.485 tons of resin per month. $0.485 \text{ tons} * 108.16 \text{ pounds per ton resin processed per month} = 52.46 \text{ pounds of styrene emitted per month.}$

Due to the level of emissions, this operation requires a Permit to Install (PTI). Since The Shack Hunting Blinds has begun operation of this process without a PTI, it is in violation of Rule 201. Rule 201 requires that a source of air pollution obtain a PTI prior to commencing operation of a process. A Violation Notice will be issued.

SUMMARY

The Shack Hunting Blinds was in non-compliance at the time of the inspection.

NAME 

DATE 4-5-17

SUPERVISOR 